

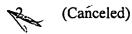
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

(Currently Amended) A method for phonetic recognition, for using principles of phonetic recognition and a general database of phonetic sounds and corresponding characters to conduct phonetic recognition, without requiring a database of personal phonetic sounds and corresponding characters; the method for phonetic recognition comprising the steps of:

- (1) processing a phonetic sound generated by a user and transforming the phonetic sound into a phonetic waveform;
- (2) dividing a sound packet of the phonetic waveform into parts of consonant, wind and vowel;
- (3) recognizing the parts of consonant and wind respectively according to waveform characteristics:
- (4) determining characteristic parameters of the part of vowel including turning number, wave number and slope of one of repeated waveforms that constitute the part of vowel, and recognizing the part of vowel by comparing the determined characteristic parameters against a rule for vowel recognition, wherein the turning number represents the total number of turning points in the vowel part and the wave number represents the total number of positive going zero crossings in the vowel part;
- (5) combining the recognized parts for determining a character corresponding to the phonetic sound; and
 - (6) completing the phonetic recognition.



(Currently Amended) The method of claim [[2]] 1, wherein the part of



consonant has a waveform of gradation, affricate, extrusion or plosive; and the part of wind is much higher in frequency than the parts of consonant and vowel.

4. (Canceled)

(Currently Amended) A method for phonetic recognition, for using principles of phonetic recognition and a general database of phonetic sounds and corresponding characters to conduct phonetic recognition, without requiring a database of personal phonetic sounds and corresponding characters; the method for phonetic recognition comprising the steps of:

- (1) processing a phonetic sound generated by a user and transforming the phonetic sound into a phonetic waveform;
- (2) analyzing physical properties of the phonetic waveform for acquiring characteristic parameters of the waveform;
- (3) dividing a sound packet of the phonetic waveform into parts of consonant, wind and vowel, and recognizing a character consonant and a character wind according to the characteristic parameters of the waveform;
- (4) determining characteristic parameters of the part of vowel including turning number, wave number and slope from one of repeated waveforms that constitute the part of vowel, and recognizing a character vowel by comparing the determined characteristic parameters against a rule for vowel recognition, wherein the turning number represents the total number of turning points in the vowel part and the wave number represents the total number of positive going zero crossings in the vowel part;
- (5) combining the recognized character consonant and character vowel for obtaining a corresponding character, and
 - (6) completing the phonetic recognition.

(Previously Presented) The method of claim 5, wherein the part of consonant has a waveform of gradation, affricate, extrusion or plosive; and the part of wind is much higher in frequency than the parts of consonant and vowel.

(Canceled)

(Currently Amended) A method for phonetic recognition using principles of phonetic recognition and a general database of phonetic sounds and corresponding characters to conduct phonetic recognition, without requiring a database of personal phonetic sounds and corresponding characters; the method for phonetic recognition comprising the steps of:

- (1) processing a phonetic sound generated by a user and transforming the phonetic sound into a phonetic waveform;
- (2) dividing a sound packet of the phonetic waveform into parts of consonant, wind and vowel, and determining a fore frequency and a rear frequency of the sound packet;
- (3) recognizing the parts of consonant and vowel according to waveform characteristics respectively, determining characteristic parameters of the part of vowel including turning number, wave number and slope of one of repeated waveforms that constitute the part of vowel, and recognizing the part of vowel by comparing the determined characteristic parameters against a rule for vowel recognition, and recognizing a tone for the phonetic sound according to a rule for determining the fore and rear frequencies, wherein the turning number represents the total number of turning points in the vowel part and the wave number represents the total number of positive going zero crossings in the vowel part;
- (4) combining the recognized parts and the recognized tone for determining a corresponding character for the phonetic sound; and
 - (5) completing the phonetic recognition.

(Canceled)

(Currently Amended) The method of claim [[9]] 8, wherein the part of consonant has a waveform of gradation, affricate, extrusion or plosive; and the part of wind is much higher in frequency than the parts of consonant and vowel.

(Canceled)

(Original) The method of claim 8, wherein in the step (2), the fore frequency is determined by taking an average frequency for a first quarter region of the sound packet, and the rear frequency is determined by taking an average frequency for a final quarter region of the sound packet.

(Currently Amended) A method for phonetic recognition, for using principles of phonetic recognition and a general database of phonetic sounds and corresponding characters to conduct phonetic recognition, without requiring a database of personal phonic sounds and corresponding characters; the method for phonetic recognition comprising tie steps of:

- (1) pressing a phonetic sound generated by a user and transforming the phonetic sound into a phonetic waveform;
- (2) analyzing physical properties of the phonetic waveform for acquiring characteristic parameters of the waveform, and determining a fore frequency and a rear frequency of the sound packet;
- (3) dividing a sound packet of the phonetic waveform into parts of consonant, wind and vowel, and recognizing a character consonant and a character wind according to the characteristic parameters of the waveform;
- (4) determining characteristic parameters of the part of vowel including turning number, wave number and slope from one of repeated waveforms that constitute the part of vowel, and recognizing a character vowel by comparing the determined characteristic parameters against a rule for vowel recognition; and recognizing a tone for the phonetic sound according to a rule for determining the fore and rear frequencies, wherein the turning number represents the total number of turning points in the vowel part and the wave number represents the total number of positive going zero crossings in the vowel part;
- (5) combining the recognized character consonant and character vowel and the recognized tone for determining a corresponding character for the phonetic sound; and
 - (6) completing the phonetic recognition.

(Previously Presented) The method of claim 13, wherein the part of consonant has a waveform of gradation affricate, extrusion or plosive; and the part of wind is much higher in frequency than the parts of consonant and vowel.

16. (Canceled)

(Original) The method of claim 13, wherein in the step (2), the fore frequency is determined by taking an average frequency for a first quarter region of the sound packet, and the rear frequency is determined by taking an average frequency for a final quarter region of the sound packet.

of phonetic recognition and a general database of phonetic sounds and corresponding characters to conduct phonetic recognition, without requiring a database of personal phonetic sounds and corresponding characters; the system for phonetic recognition comprising:

a phonetic recognition principle database including principles of phonetic recognition to be used for processing a sound packet of a phonetic sound by dividing the sound packet into parts of consonant, wind and vowel, recognizing the parts of consonant and wind, and recognizing the part of vowel by a principle of vowel recognition;

a database of phonetic sounds and corresponding characters, wherein a phonetic sound consists of a consonant and a vowel, and has a corresponding character;

a phonetic transformation processing module for transforming a user's phonetic sound into a corresponding physical waveform signal and inputting the waveform signal to a phonetic recognition processing module for phonetic recognition; and

a phonetic recognition processing module, according to the principles of phonetic recognition in the phonetic recognition principle database, for processing the waveform signal by dividing a sound packet thereof into parts of consonant, wind and vowel, and recognizing the parts respectively, so as to combine the recognized parts of consonant and vowel to be compared with the database of phonetic sounds and corresponding characters for obtaining a corresponding character for the phonetic sound,

wherein recognizing the parts of the sound packet includes recognizing the part of vowel by determining characteristic parameters of the part of vowel including turning number, wave number and slope from one of repeated waveforms that constitute the part of vowel, and recognizing the part of vowel by comparing the determined characteristic parameters against the principle for vowel recognition, wherein the turning number represents the total number of turning points in the vowel part and the wave number represents the total number of positive going zero crossings in the vowel part.

(Currently Amended) A system for phonetic recognition, for using principles of phonetic recognition and a general database of phonetic sounds and corresponding characters to conduct phonetic recognition, without requiring a database of personal phonetic sounds and corresponding characters, the system for phonetic recognition comprising:

a phonetic recognition principle database including principles of phonetic recognition to be used for processing a sound packet of a phonetic sound by dividing the sound packet into parts of consonant wind and vowel, determining a fore frequency and a rear frequency for the sound packet, recognizing the parts of consonant and wind, and recognizing the part of vowel by a principle of vowel recognition;

a database of phonetic sounds and corresponding characters, wherein a phonetic sound consists of a consonant and a vowel, or a consonant, a vowel and a tone, and has a corresponding character;

a phonetic transformation processing module for transforming a user's phonetic sound into a corresponding physical waveform signal and inputting the waveform signal to a phonetic recognition processing module for phonetic recognition; and

a phonetic recognition processing module, according to the principles of phonetic recognition in the phonetic recognition principle database, for processing the waveform signal by dividing a sound packet thereof into parts of consonant, wind and vowel, and determining a fore frequency and a rear frequency for the sound packet, so as to recognize the parts respectively, recognize a tone for the phonetic sound according to a rue for determining the fore and rear frequencies, and combine the recognized parts of consonant and vowel or the recognized parts of consonant and vowel together with the recognized tone

to be compared with the database of phonetic sounds and corresponding characters for obtaining a corresponding character for the phonetic sound,

wherein recognizing the parts of the sound packet includes recognizing the part of vowel by determining characteristic parameters of the part of vowel including turning number, wave number and slope from one of repeated waveforms that constitute the part of vowel by comparing the determined characteristic parameters against the principle for vowel recognition, wherein the turning number represents the total number of turning points in the vowel part and the wave number represents the total number of positive going zero crossings in the vowel part.

(Previously Presented) The system of claim 18, wherein the principles of phonetic recognition in the phonetic recognition principle database include a rule for dividing the sound packet into the parts of consonant and wind; a rule for recognizing the parts of consonant, wind and vowel; and a rule for combining the recognized parts of consonant and vowel.

(Previously Presented) The system of claim 18, wherein the principles of phonetic recognition in the phonetic recognition principle database include a rule for dividing the sound packet into the parts of consonant, wind and vowel; a rule for determining the fore and rear frequencies; a rule for recognizing the parts of consonant and wind; a rule for recognizing the tone for the phonetic sound; a rule for combining the recognized parts of consonant and vowel; and a rule for combining the recognized parts of consonant and vowel and the recognized tone.